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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/799,048

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Shubhasheesh Anand

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EXAMINER

STIBLEY, MICHAEL R

ART UNIT

PAPER NUMBER

4194

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/799,048

Applicant(s)

ANAND ET AL.

Examiner

MICHAEL STIBLEY

Art Unit

4194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2004, as amended on 5/10/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-13 and 15-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-13 and 15-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on March 11, 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 2/12/2007, 2/21/2006, 2/28/2005, 6/18/2004, 8/02/2004, 8/12/2005, 9/27/2004, 10/12/2005, 10/24/2006
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in reply to the application filed originally on March 11, 2004 and as amended by preliminary amendment on May 10, 2006.
2. Claims 1-6, 8-13, and 15-28 are currently pending and have been examined. Claims 7 and 14 have been cancelled.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1-6, 8-13, and 15-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Marsh et al. US PATENT 5,848,397.**
5. **CLAIM 1 and CLAIM 8:** As per claim 1 and 8, Marsh et al teaches the method and computer readable medium comprising: storing revenue information that indicates potential revenue amounts for a plurality of advertisements, wherein each of the plurality of advertisements is associated with corresponding delivery criteria; (The database management system 106 stores various information related to advertisements (e.g., vendor identification, billing information, (potential revenue amounts) target demographics), and information regarding system users. Marsh Col. 6 lines 38-41.) "the scheduling criteria for the advertisements include the time to expiration, time since last seen, maximum exposures to a user, and percentage of exposures remaining." **(corresponding delivery criteria)** Marsh Col. 3 line 66 – Col. 4 line2

6. receiving a request to provide over the network a piece of electronic content that includes a slot for an advertisement; "The server system 104 may receive advertisements from an advertiser 108." (request) Marsh Col 14 lines 25-27.

comparing slot attributes of the slot with the delivery criteria of the plurality of advertisements to determine a subset of the plurality of advertisements that qualify for inclusion in the slot ("The sort routine (comparing) 701 of the advertisement display scheduler 700 then sorts the advertisements in the current queue according to predetermined characteristics (slot attributes) of the advertisements, as is more fully described below (step 720)." Marsh et al Col. 9 lines 2-6, and "The particular values used in the representative embodiment were chosen to increase the probability of completing the maximum exposures for a given advertisement prior to the time the advertisement expires. (delivery criteria) thereby maximizing the revenue earned from the vendor who commissioned the advertisement. In effect, the advertisement display scheduler functions like a shortest-time-to-completion/first scheduled operating system. Persons skilled in the art will recognize, however, that other values may be equally or better suited for a given application in view of the particular characteristics of the advertisements, vendor requirements and billing considerations." Marsh et al Col. 13 lines 7-18)); According to the representative embodiment of the present invention, the client system 101 includes an advertisement display scheduler that controls the display of both the banner advertisements 601 and the showcase advertisements 1001 (**banner and showcase advertisements have different slot attributes**). Referring to FIG. 6, the advertisement display scheduler 700 can be configured as a software module

included in the client system software and includes a new advertisement routine 703, a sort routine 701 and a display routine 702. The advertisement display scheduler 700 likewise maintains a plurality of advertisement queues Q.sub.0 . . . Q.sub.n, each of which contains a plurality of advertisements (e.g., MSG.sub.01 . . . MSG.sub.0n)(depending in part on individual slot attributes, whether showcase or banner advertisement). The advertisement queues Q.sub.0 . . . Q.sub.n can be maintained in the storage device 206. Marsh et al. Col. 8, lines 34-46 See also Figs 4 (banner advertisements 601 and showcase advertisements 1001) See also Fig. 5 (display showcase messages/accumulate showcase statistics.,909) See also Fig.3 (display banner messages/accumulate banner statistics, 501)

7. The advertisement distribution scheduler includes additional functionality that assists in the maximization of advertisement revenues and the minimization of system costs. For example, for each selected user, the advertisement distribution scheduler reviews (1) the usage profile of the user (e.g., statistical information collected in the statistics log file at the user's computer 101) to ascertain expected advertisement consumption over a predetermined period; and (2) the current advertisement load of the user and time to expiry. Thus, advertisements can be allocated to users who are more likely to be exposed to the advertisements prior to the expiration period of the advertisement. (comparing slot attributes of the slot with delivery criteria (using statistical information analyzing delivery criteria/consumption see Marsh col. 7 line 66- col. 8 line 23 and Marsh col. 7 lines 7-40) of the advertisements to determine a subset of the plurality of advertisements which qualify for inclusion

in the slot is performed in response to receiving the request Marsh et al, Col. 15, lines 54-65.:

8. and selecting an advertisement from the subset of advertisements to include in the slot based, at least in part, on the potential revenue amounts; "...maximizing the revenue earned from the vendor..." "other values may be equally or better suited for a given application in view of...billing considerations..." **(potential revenue amounts)** Marsh et al Col. 13, lines 7-18 "A less lucrative advertisement may be favored (selecting) over a more lucrative advertisement if that less lucrative advertisement is nearing expiration. Yet another constraint on the sorting process may be that an advertisement nearer to reaching its maximum exposures is favored to make room in the advertisement queues for potentially more-lucrative advertisements." Marsh et al Col. 9 lines 50-64.
9. associating each of the plurality of advertisements with a priority class; "Each advertisement transmitted to the client system 101 includes control information, such as the expiration date for the advertisement and the maximum number of times the advertisement may be shown to a user, along with a priority assigned by the server system (e.g., HIGH, MEDIUM, LOW, NO)." Marsh Col. 8, lines 49-54.
10. and filtering out the subset of the plurality of advertisements that have a priority class that is lower than the priority class of any other advertisement that belongs to the subset; ("The advertisement download scheduler may ensure, for example, that high-priority advertisements are transmitted to a user before (filtering) low-priority advertisements." Marsh et al Col. 3 lines 29-33)

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wherein the priority class associated with each of the plurality of advertisements indicates whether the corresponding advertisement is the subject of a guaranteed contract. "Upon receipt of an advertisement from the server system, the advertisement display scheduler determines the priority of the advertisement and assigns it to one of a plurality of prioritize advertisement queues (e.g., HIGH.sub.-- PRIORITY, MEDIUM.sub.-- PRIORITY, LOW.sub.-- PRIORITY, NO.sub.-- PRIORITY). Each of these priority queues are sorted according to predetermined scheduling criteria so that advertisements deemed to be **"more important" (guaranteed contract being more important than an unguaranteed contract)** are presented to a user first." Marsh Col. 3, lines 57-65; "In one embodiment, the scheduling criteria for the advertisements include the time to expiration, time since last seen, maximum exposures to a user, and percentage of exposures remaining. The scheduling criteria are selected with the goal of maximizing the revenue to the e-mail service provider, subject to a "no starvation" constraint, in view of the **particular billing arrangements (whether or not contract is guaranteed)** with the vendors associated with the advertisements." Marsh col. 3 line 66 – Col. 4, line 6

11. **CLAIM 2 and CLAIM 9:** As per claims 2 and 9, Marsh et al further teaches the method of Claim 1 and the computer readable medium of Claim 8 as described above, wherein: each advertisement of the plurality of advertisements has a corresponding delivery obligation and a corresponding potential revenue amount. ("A goal of the sorting process is to maximize the revenue that may be generated from each advertisement given the particular billing arrangements (**potential revenue amount**)

with the **associated** vendors, subject to a "no starvation" constraint. "Starvation" in this context refers, for example, to an advertisement reaching its expiration date without having reached its maximum number of exposures (**delivery obligation**). (It will be appreciated that there is a cost in transferring advertisements from the server system 104 to client computers 101.) A less lucrative advertisement may be favored over a more lucrative advertisement if that less lucrative advertisement is nearing expiration. (to determine which advertisement is more lucrative each advertisement must have a corresponding potential revenue) Yet another constraint on the sorting process may be that an advertisement nearer to reaching its maximum exposures is favored to make room in the advertisement queues for potentially more-lucrative advertisements." Marsh et al Col. 9 lines 50-64.

12. **CLAIM 3 and CLAIM 10:** As per claims 3 and 10, Marsh et al further teaches the method of Claim 2 and the computer readable medium of Claim 9 as described above, wherein the selecting an advertisement to include further comprises: selecting a first advertisement instead of a second advertisement if the corresponding potential revenue amount of the first advertisement is higher than the corresponding potential revenue amount of the second advertisement. "Yet another constraint on the sorting process may be that an advertisement nearer to reaching its maximum exposures is favored to make room in the advertisement queues for potentially more-lucrative advertisements." (selecting first advertisement over second advertisement if higher potential revenue ie more lucrative) Marsh et al Col. 9 lines 50-64.

13. **CLAIM 4 and CLAIM 11:** As per claims 4 and 11, Marsh et al further teaches the method of claim 1 and the computer readable medium of claim 8 as described above, wherein the comparing slot attributes of the slot with delivery criteria of the advertisements to determine a subset of the plurality of advertisements which qualify for inclusion in the slot is performed in response to receiving the request.

14. According to the representative embodiment of the present invention, the client system 101 includes an advertisement display scheduler that controls the display of both the banner advertisements 601 and the showcase advertisements 1001 (**banner and showcase advertisements have different slot attributes**). Referring to FIG. 6, the advertisement display scheduler 700 can be configured as a software module included in the client system software and includes a new advertisement routine 703, a sort routine 701 and a display routine 702. The advertisement display scheduler 700 likewise maintains a plurality of advertisement queues Q.sub.0 . . . Q.sub.n, each of which contains a plurality of advertisements (e.g., MSG.sub.01 . . . MSG.sub.0n)(depending in part on individual slot attributes, whether showcase or banner advertisement). The advertisement queues Q.sub.0 . . . Q.sub.n can be maintained in the storage device 206. Marsh et al. Col. 8, lines 34-46 See also Figs 4 (banner advertisements 601 and showcase advertisements 1001) See also Fig. 5 (display showcase messages/accumulate showcase statistics,,909) See also Fig.3 (display banner messages/accumulate banner statistics, 501)

15. The advertisement distribution scheduler includes additional functionality that assists in the maximization of advertisement revenues and the minimization of system

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costs. For example, for each selected user, the advertisement distribution scheduler reviews (1) the usage profile of the user (e.g., statistical information collected in the statistics log file at the user's computer 101) to ascertain expected advertisement consumption over a predetermined period; and (2) the current advertisement load of the user and time to expiry. Thus, advertisements can be allocated to users who are more likely to be exposed to the advertisements prior to the expiration period of the advertisement. (comparing slot attributes of the slot with delivery criteria (using statistical information analyzing delivery criteria/consumption see Marsh col. 7 line 66- col. 8 line 23 and Marsh col. 7 lines 7-40) of the advertisements to determine a subset of the plurality of advertisements which qualify for inclusion in the slot is performed in response to receiving the request Marsh et al, Col. 15, lines 54-65.

16. **CLAIM 5 and CLAIM 12:** As per claims 5 and 12, Marsh et al further teaches the method of claim 1 and the computer readable medium of claim 8 as described above, wherein the piece of electronic content is a web page. ("Apart from the Applicants' innovative e-mail system, some on-line service providers also display advertising to their users. For example, the America Online network displays advertisements to users on a portion of their computer screen. Likewise, advertisements are often included as part of web pages seen by users when accessing certain World Wide Web sites on the Internet. Often in such systems, every user accessing a certain screen or site is shown the same advertisement. More sophisticated systems have the capability to change an advertisement after a certain period of time. Nevertheless, such systems

generally require that the user be connected to the on-line network to view the advertisements." Marsh et al Col. 2 lines 22-34) "Showcase advertisements 1001 can be displayed in addition to the previously-described banner advertisements 601 during periods of on-line activity (electronic content as web page); for example, during the entire time that the client system 101 is establishing communications and actually communicating with the server system 104. Marsh et al Col. 7, line 66 – Col. 8, line 4.

17. **CLAIM 6 and CLAIM 13:** As per claims 6 and 13, Marsh et al further teaches the method of claim 1 and the computer readable medium of claim 8 as described above, wherein the piece of electronic content is a video stream. "It will be appreciated that advertisements may also include community service messages, system information messages, colorful and pleasing artwork, photographic works, logos, slogans and the like. The term advertisement includes content that is other than e-mail messages to and from users of the e-mail system. Advertisements can include text, graphics, sound, animations, video, (video stream) etc. Thus, it will be appreciated that the advertisement display scheduler 700 can be used to schedule the output of these formats of advertisements," Marsh et al Col. 15 lines 21-30 See also Marsh et al Col. 8, Lines 24- 30 (...video display...)

18. **CLAIM 15 and CLAIM 22:** As per claims 15 and 22, Marsh et al teaches a method and a computer readable medium for managing an inventory of advertisement slots in electronic content, comprising: exclusively offering a first portion of the inventory to buyers that satisfy a set of criteria; and offering a second portion of the inventory to buyers that are not required to satisfy the set of criteria. ("The

advertisement display scheduler 700 may also advantageously facilitate separation of particular advertisements. For example, a given advertisement may have associated with it one or more other advertisements with which it is **mutually exclusive** (e.g., advertisements relating to **competing products (set of criteria)** of another vendor). In such a case, the advertisement display scheduler 700 may determine the appropriate order for a given advertisement queue and then make a pass through the sorted advertisement queue to eliminate conflicting advertisements. A list of **excluded advertisements (will be scheduled at other time)** may be included as part of the scheduling criteria associated with each advertisement. Advertisement separation performed by the advertisement display scheduler 700 may also include a time component. For example, **once a first advertisement is output (first portion of inventory), a second advertisement for a competing produce (second portion of inventory) (will not be output for a period of time, e.g., seven days)**. In the representative embodiment, the period of time for separation is one pass through the advertisement queue. Thus, the period of separation can be determined dynamically based upon the length of time that the user utilizes the system. The process of excluding advertisements from a given queue based upon other advertisements can take place either before or after the sort routine 701. The sort routine 701 of the advertisement display scheduler determines the order in which the advertisements in the current advertisement queue are presented to a user. The sort routine 701 may employ any suitable technique, such as a queue insert or a bubble sort. Such techniques are well known in the art, and thus are not described in detail herein.

Moreover, the present invention does not depend on the use of any particular sorting technique.” Marsh et al Col 9, line 66 – Col 10 line 29.)

19. **SECONDLY, “A less lucrative advertisement may be favored (exclusively offering a first portion of inventory to buyers that satisfy a set of criteria) over a more lucrative advertisement (offering a second portion of the inventory to buyers that are not required to satisfy the set of criteria) if that less lucrative advertisement is nearing expiration. ” Marsh et al Col. 9 lines 50-64**

20. **ADDITIONALLY, “Yet another constraint on the sorting process may be that an advertisement nearer to reaching its maximum exposures is favored (exclusively offering a first portion of inventory to buyers that satisfy a set of criteria) to make room in the advertisement queues for potentially more-lucrative advertisements (offering a second portion of the inventory to buyers that are not required to satisfy the set of criteria).” Marsh et al Col. 9 lines 50-64** especially, in light of offering first portions, second portions, or less than entirety of second portions of inventory to potential buyers, meeting or not meeting criteria, being old and well known to a person having ordinary skill in the art of running a business.

21. **CLAIM 16 and CLAIM 23:** As per claims 16 and 23 Marsh et al further teaches the method of Claim 15 and the computer readable medium of Claim 22, further comprising: offering less than the entirety of the second portion of the inventory for purchase to the buyers that are not required to satisfy the set of criteria. **(“The advertisement display scheduler 700 may also advantageously facilitate separation of particular advertisements. For example, a given advertisement may have associated**

with it one or more other advertisements with which it is **mutually exclusive** (e.g., advertisements relating to **competing products (set of criteria)** of another vendor). In such a case, the advertisement display scheduler 700 may determine the appropriate order for a given⁹ advertisement queue and then make a pass through the sorted advertisement queue to eliminate conflicting advertisements. A list of **excluded advertisements (will be scheduled at other time)** may be included as part of the scheduling criteria associated with each advertisement. Advertisement separation performed by the advertisement display scheduler 700 may also include a time component. For example, **once a first advertisement is output (first portion of inventory), a second advertisement for a competing produce (less than the entirety of the second portion) will not be output for a period of time, e.g., seven days**. In the representative embodiment, the period of time for separation is one pass through the advertisement queue. Thus, the period of separation can be determined dynamically based upon the length of time that the user utilizes the system. The process of excluding advertisements from a given queue based upon other advertisements can take place either before or after the sort routine 701. The sort routine 701 of the advertisement display scheduler determines the order in which the advertisements in the current advertisement queue are presented to a user. The sort routine 701 may employ any suitable technique, such as a queue insert or a bubble sort. Such techniques are well known in the art, and thus are not described in detail herein. Moreover, the present invention does not depend on the use of any particular sorting technique.” Marsh et al Col 9, line 66 – Col 10 line 29.)

22. **SECONDLY**, "A less lucrative advertisement may be favored (**exclusively offering a first portion of inventory to buyers that satisfy a set of criteria**) over a more lucrative advertisement (**offering less than entirety of second portion of the inventory to buyers that are not required to satisfy the set of criteria**) if that less lucrative advertisement is nearing expiration." Marsh et al Col. 9 lines 50-64

23. **ADDITIONALLY**, "Yet another constraint on the sorting process may be that an advertisement nearer to reaching its maximum exposures is favored (**exclusively offering a first portion of inventory to buyers that satisfy a set of criteria**) to make room in the advertisement queues for potentially **more-lucrative advertisements (offering less than entirety of second portion of the inventory to buyers that are not required to satisfy the set of criteria)**." Marsh et al Col. 9 lines 50-64 especially, in light of offering first portions, second portions, or less than entirety of second portions of inventory to potential buyers, meeting or not meeting criteria, being old and well known to a person having ordinary skill in the art of running a business.

24. **CLAIM 17 and CLAIM 24**: As per claims 17 and 24 Marsh et al further teaches the method of Claim 16 and the computer readable medium of Claim 23, further comprising: setting an initial price that the buyers are allowed to bid on the second portion of the inventory. **A goal of the sorting process is to maximize the revenue that may be generated from each advertisement given the particular billing arrangements (each advertiser having particular billing arrangements, given its broadest reasonable interpretation, includes for allowing a buyer to negotiate and to bid on the second set portion of inventory, whether or not an initial price is set), with the**

associated vendors, subject to a "no starvation" constraint. "Starvation" in this context refers, for example, to an advertisement reaching its expiration date without having reached its maximum number of exposures. (It will be appreciated that there is a cost in transferring advertisements from the server system 104 to client computers 101.) A **less lucrative** advertisement may be favored over a **more lucrative** advertisement if that less lucrative advertisement is nearing expiration. Yet another constraint on the sorting process may be that an advertisement nearer to reaching its maximum exposures is favored to make room in the advertisement queues for potentially more-lucrative advertisements. (less lucrative and more-lucrative, given its broadest reasonable interpretations would include setting an initial price that the buyers are allowed to bid on the second portion of the inventory so as to maximize revenue, especially in light of setting an initial price that the buyers are allowed to bid on the second portion of the inventory is old and well known to a person having ordinary skill in the art of running a business.

25. **Additionally**, "Each advertisement has associated with it an ad contract which specifies a demographic profile reach and frequency, duration and time of expiry for the advertisement. The ad contract can be stored in the database management system106." Marsh et al, Col 15, lines 37-41. Where it is well-known and old to a person having ordinary skill in the art of running a business that a contract is often a result of bargaining, price setting, negotiating, and bidding."

26. **CLAIM 18 and CLAIM 25:** As per claims 18 and 25, Marsh et al teaches the method of Claim 18 and the computer readable medium of Claim 25 for determining

which advertisements to include with electronic content delivered to users over a network, comprising: storing revenue information that indicates potential revenue amounts for a plurality of advertisements, wherein each of the plurality of advertisements is associated with corresponding delivery criteria (The database management system 106 stores various information related to advertisements (e.g., vendor identification, billing information, **(potential revenue amounts)** target demographics), and information regarding system users. Marsh Col. 6 lines 38-41.) "the scheduling criteria for the advertisements include the time to expiration, time since last seen, maximum exposures to a user, and percentage of exposures remaining. " **(corresponding delivery criteria)** Marsh Col. 3 line 66 – Col. 4 line2 and a priority class "Each advertisement transmitted to the client system 101 includes control information, such as the expiration date for the advertisement and the maximum number of times the advertisement may be shown to a user, along with a **priority** assigned by the server system (e.g., HIGH, MEDIUM, LOW, NO)," Marsh Col. 8, lines 49-54; receiving a request to provide over the network a piece of electronic content that includes a slot for an advertisement "The server system 104 may receive advertisements from an advertiser 108." **(request)** Marsh Col 14 lines 25-27 and Fig.8; comparing slot attributes of the slot with the delivery criteria of the plurality of advertisements to determine a subset of the plurality of advertisements that qualify for inclusion in the slot ("The sort routine (comparing) 701 of the advertisement display scheduler 700 then sorts the advertisements in the current queue according to predetermined characteristics **(slot attributes)** of the advertisements, as is more fully

described below (step 720)." Marsh et al Col. 9 lines 2-6, and "The particular values used in the representative embodiment were chosen to increase the probability of completing the maximum exposures for a given advertisement prior to the time the advertisement expires, **(delivery criteria)** thereby maximizing the revenue earned from the vendor who commissioned the advertisement. In effect, the advertisement display scheduler functions like a shortest-time-to-completion/first scheduled operating system. Persons skilled in the art will recognize, however, that other values may be equally or better suited for a given application in view of the particular characteristics of the advertisements, vendor requirements and billing considerations." Marsh et al Col. 13 lines 7-18); According to the representative embodiment of the present invention, the client system 101 includes an advertisement display scheduler that controls the display of both the banner advertisements 601 and the showcase advertisements 1001 (**banner and showcase advertisements have different slot attributes**). Referring to FIG. 6, the advertisement display scheduler 700 can be configured as a software module included in the client system software and includes a new advertisement routine 703, a sort routine 701 and a display routine 702. The advertisement display scheduler 700 likewise maintains a plurality of advertisement queues Q.sub.0 . . . Q.sub.n, each of which contains a plurality of advertisements (e.g., MSG.sub.01 . . . MSG.sub.0n)(depending in part on individual slot attributes, whether showcase or banner advertisement). The advertisement queues Q.sub.0 . . . Q.sub.n can be maintained in the storage device 206. Marsh et al. Col. 8, lines 34-46 See also Figs 4 (banner advertisements 601 and showcase advertisements 1001) See also Fig. 5

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(display showcase messages/accumulate showcase statistics,,909) See also Fig.3

(display banner messages/accumulate banner statistics, 501) _

27. The advertisement distribution scheduler includes additional functionality that assists in the maximization of advertisement revenues and the minimization of system costs. For example, for each selected user, the advertisement distribution scheduler reviews (1) the usage profile of the user (e.g., statistical information collected in the statistics log file at the user's computer 101) to ascertain expected advertisement consumption over a predetermined period; and (2) the current advertisement load of the user and time to expiry. Thus, advertisements can be allocated to users who are more likely to be exposed to the advertisements prior to the expiration period of the advertisement. (comparing slot attributes of the slot with delivery criteria (using statistical information analyzing delivery criteria/consumption see Marsh col. 7 line 66- col. 8 line 23 and Marsh col. 7 lines 7-40) of the advertisements to determine a subset of the plurality of advertisements which qualify for inclusion in the slot is performed in response to receiving the request _Marsh et al, Col. 15, lines 54-65.; and selecting an advertisement from the subset of advertisements to include in the slot based on, at least in part, whether the slot is reserved for buyers that satisfy a set of criteria . ("The advertisement display scheduler 700 may also advantageously facilitate separation (selecting an advertisement from subset of advertisements to include in the slot) of particular advertisements. For example, a given advertisement may have associated with it one or more other advertisements with which it is mutually exclusive (e.g., advertisements relating to competing products

(whether the slot is reserved for buyers that satisfy set of criteria in this case whether or not a competitor) of another vendor). In such a case, the advertisement display scheduler 700 may determine the appropriate order for a given9 advertisement queue and then make a pass through the sorted advertisement queue to eliminate conflicting advertisements. A list of **excluded advertisements (will be scheduled at other time)** may be included as part of the scheduling criteria associated with each advertisement. Advertisement separation performed by the advertisement display scheduler 700 may also include a time component. For example, **once a first advertisement is output, a second advertisement for a competing product will not be output for a period of time, e.g., seven days (thus, in this case, spots within the seven day period are reserved for non-competitors, a criterion)**. In the representative embodiment, the period of time for separation is one pass through the advertisement queue. Thus, the period of separation can be determined dynamically based upon the length of time that the user utilizes the system. The process of excluding advertisements from a given queue based upon other advertisements can take place either before or after the sort routine 701. The sort routine 701 of the advertisement display scheduler determines the order in which the advertisements in the current advertisement queue are presented to a user. The sort routine 701 may employ any suitable technique, such as a queue insert or a bubble sort. Such techniques are well known in the art, and thus are not described in detail herein. Moreover, the present invention does not depend on the use of any particular sorting technique.” Marsh et al Col 9, line 66 – Col 10 line 29.)

28. **SECONDLY**, "A less lucrative advertisement may be favored over a more lucrative advertisement if that less lucrative advertisement is nearing expiration (**slot is reserved in this case for advertisements nearing expiration, a criterion**). " Marsh et al Col. 9 lines 50-64

29. **ADDITIONALLY**, "Yet another constraint on the sorting process may be that an advertisement nearer to reaching its maximum exposures is **favored** to make room in the advertisement queues for potentially **more-lucrative advertisements (slot is reserved in this case for advertisements which are more lucrative, a criterion)**." Marsh et al Col. 9 lines 50-64.

30. **CLAIM 19 and CLAIM 26:** As per claims 19 and 26 Marsh et al further teaches the method of Claim 18 and the computer readable medium of Claim 25, wherein the selecting an advertisement to include is based on the priority classes if the slot is reserved for the buyers that satisfy the set of criteria. "**Each advertisement transmitted to the client system 101 includes control information, such as the expiration date for the advertisement and the maximum number of times the advertisement may be shown to a user, along with a priority assigned by the server system (e.g., HIGH, MEDIUM, LOW, NO).**" Marsh Col. 8, lines 49-54. "**Upon receipt of an advertisement from the server system, the advertisement display scheduler determines the priority of the advertisement and assigns it to one of a plurality of prioritize advertisement queues (e.g., HIGH.sub.-- PRIORITY, MEDIUM.sub.-- PRIORITY, LOW.sub.-- PRIORITY, NO.sub.-- PRIORITY).** Each of these priority queues are sorted according to predetermined scheduling criteria so that advertisements deemed to be "more

important" **(satisfy a set of criteria)** are presented to a user first." Marsh et al, Col. 3
line 57-65

31. **CLAIM 20 and CLAIM 27:** As per claims 20 and 27, Marsh et al further teaches the method of Claim 18 and the computer readable medium of Claim 25, wherein the selecting an advertisement to include is based on the potential revenue amounts if the slot is not reserved for buyers that are not required to satisfy the set of criteria. "Yet another constraint on the sorting process may be that an advertisement nearer to reaching its maximum exposures is **favor**ed to make room in the advertisement queues for potentially **more-lucrative advertisements (slot is reserved in this case for advertisements which are more lucrative, based on potential revenue amounts).**"
Marsh et al Col. 9 lines 50-64.

32. **CLAIM 21 and CLAIM 28:** As per claims 21 and 28, Marsh et al further teaches the method of Claim 20 and the computer readable medium of Claim 27, wherein the selecting an advertisement to include further comprises: selecting a first advertisement instead of a second advertisement if the corresponding potential revenue amount of the first advertisement is higher than the corresponding potential revenue amount of the second advertisement. "Yet another constraint on the sorting process may be that an advertisement nearer to reaching its maximum exposures is **favor**ed to make room in the advertisement queues for potentially **more-lucrative advertisements (slot is reserved in this case for advertisements which are more lucrative, based on potential revenue amounts, the more lucrative advertisement goes first, requires**

comparing of corresponding potential revenue amounts)." Marsh et al Col. 9 lines
50-64.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL STIBLEY whose telephone number is (571)270-3612. The examiner can normally be reached on Monday through Friday 7:30am to 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Kyle can be reached on (571) 272-6746. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Michael Stibley/
Examiner, Art Unit 4194
January 10, 2008

/Charles Kyle/

Supervisory Patent Examiner, Art Unit 4194